The Insider's Secrets to Image Preparation

Photoshop image enhancing techniques as they apply to metal engraving

CONFIDENTIAL

Vol. I

For the MPX-50, 60, 70 & 80

Pendabryte METAL

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Photoshop image enhancing techniques as they apply to metal engraving

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Vol. I

Part 1

INTRODUCTION

I purchased an MPX-60 three years ago, from a distributor who was very happy to sell it to me. Problem was, I didn't know how to use it. And when I did figure out the basics, I was left disappointed with the image. I believed the machine was capable of much more, so I persisted.

My story is about the many hours of ruined blanks, wasted money and frustrating consults with distributors. They were either to busy with their next MPX sale, too impatient to explain the fundamentals or often unable to spell out the methods required to produce crystal clear, vivid images, time after time. My story is about a journey that began with frustration and ended in the profound satisfaction, using my techniques, of having created a breathtaking image engraved onto a thin slice of metal. Finally, it is time to share these secrets with the serious Metaza operator, captured for the first time is a series that reveals all.

The series has been divided into two volumes. They are as follows: The Insiders Secret's to Image Preparation which covers Photoshop image enhancing techniques as they apply to metal engraving and, Volume II, The Insider's Secrets to Driver Output Preparation which reveals the secret methods for configuring the output software to produce razor sharp images. While both volumes work together, and are recommended for producing highly defined images, you may deem it necessary to purchase only one or the other.

This volume has been written for two groups of people, beginning and experienced Metaza operators. If you are an experienced Metaza operator, you may find the step by step detail slow, however, both groups will find great value in the insider's secrets to creating spectacularly clear, sharp and vivid photo charms.

ICON KEY

Insider's Secret

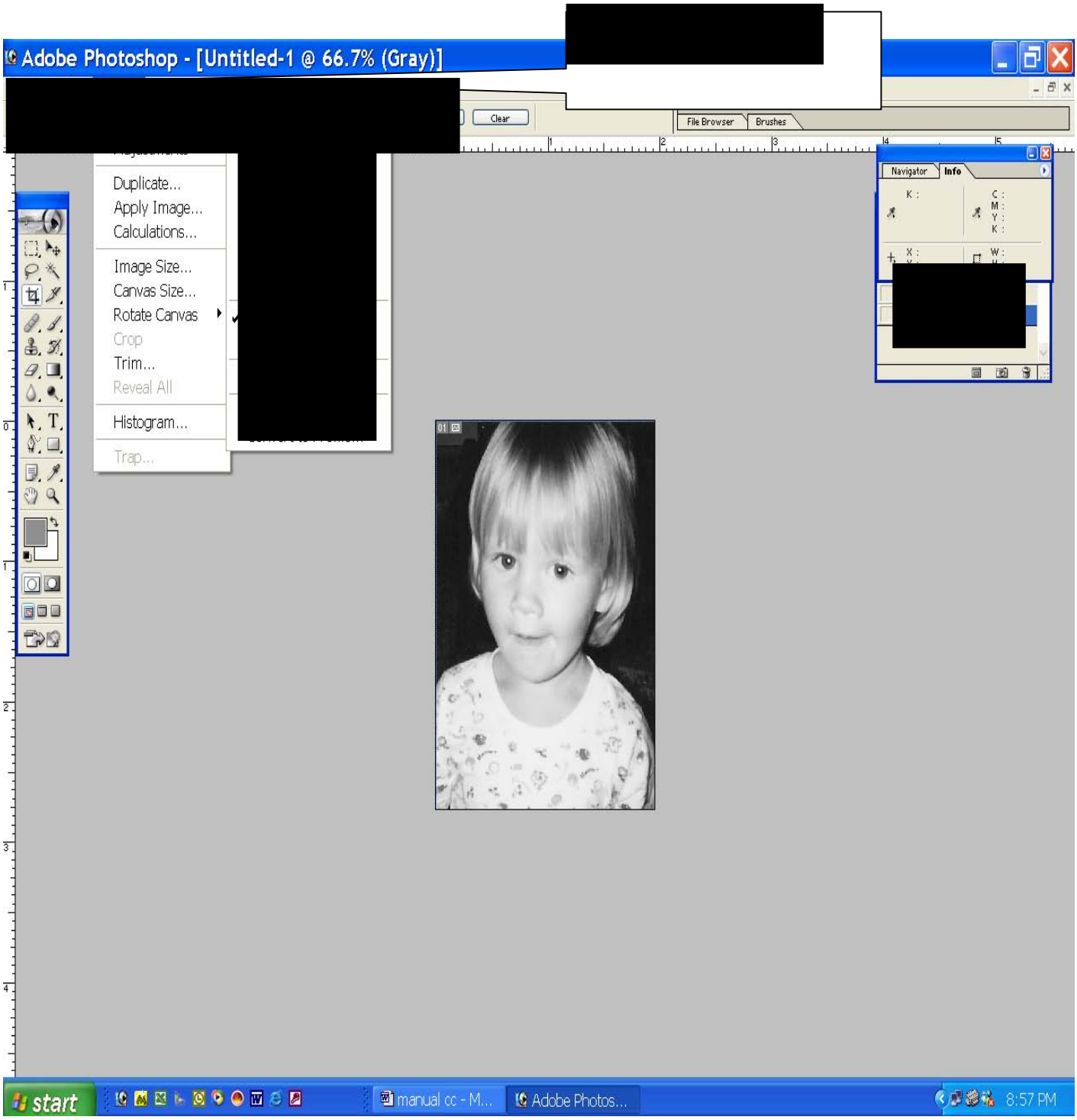
Power Tip

Design Principle

For your reference, I have highlighted certain areas with informational icons. They are as follows: the Insider's Secret icon represents the highest degree of value; valuable trade secrets found nowhere else. The Power Tip icon represents a practical tip, one level below an Insider's Secret. The Design Principle icon represents professional artistic principles I gained while completing my Advertising degree at the University of Florida.

At this point we will assume that you have Photoshop installed on your computer. Let's begin.

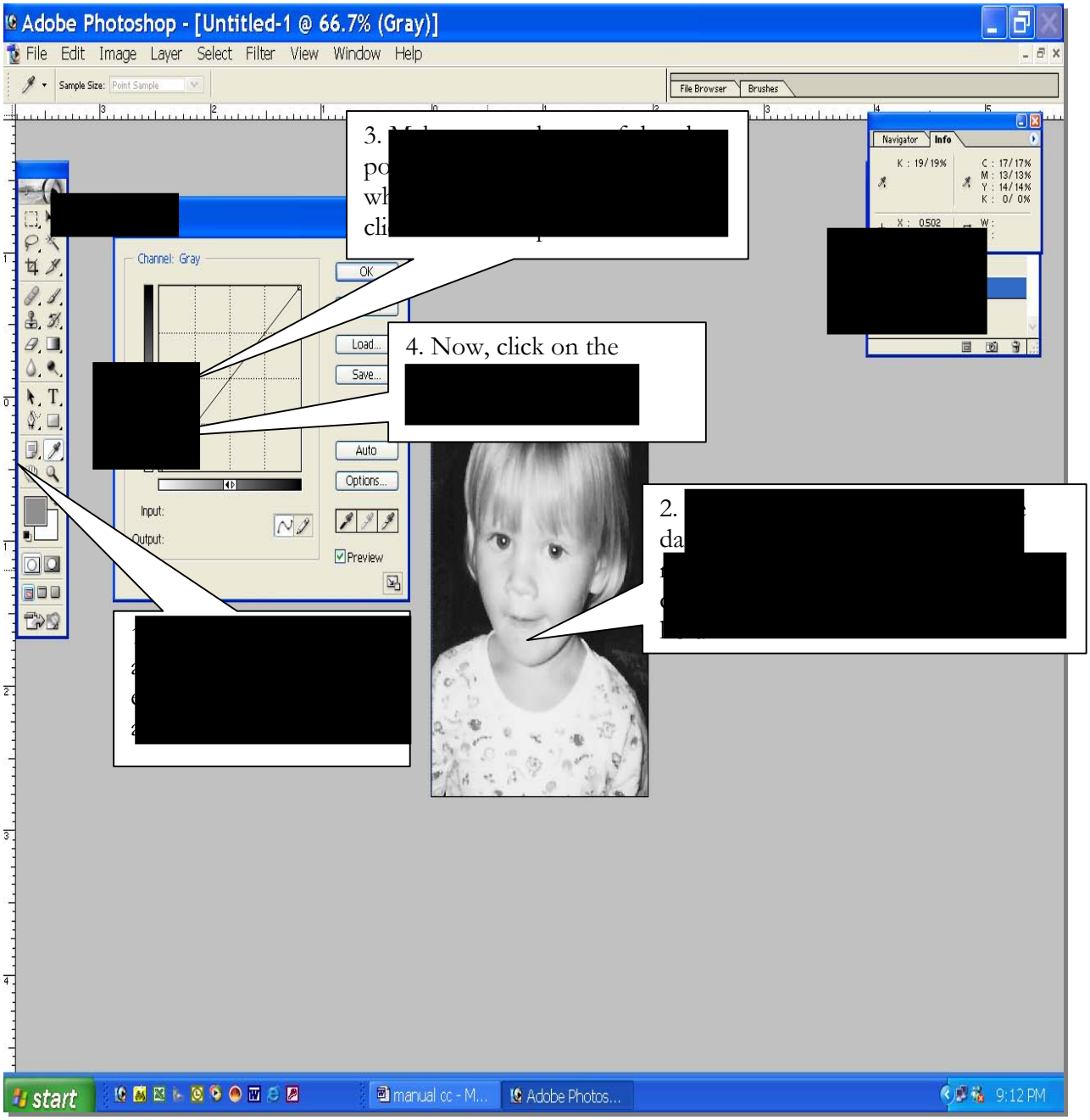
Convert the image



Power Tip

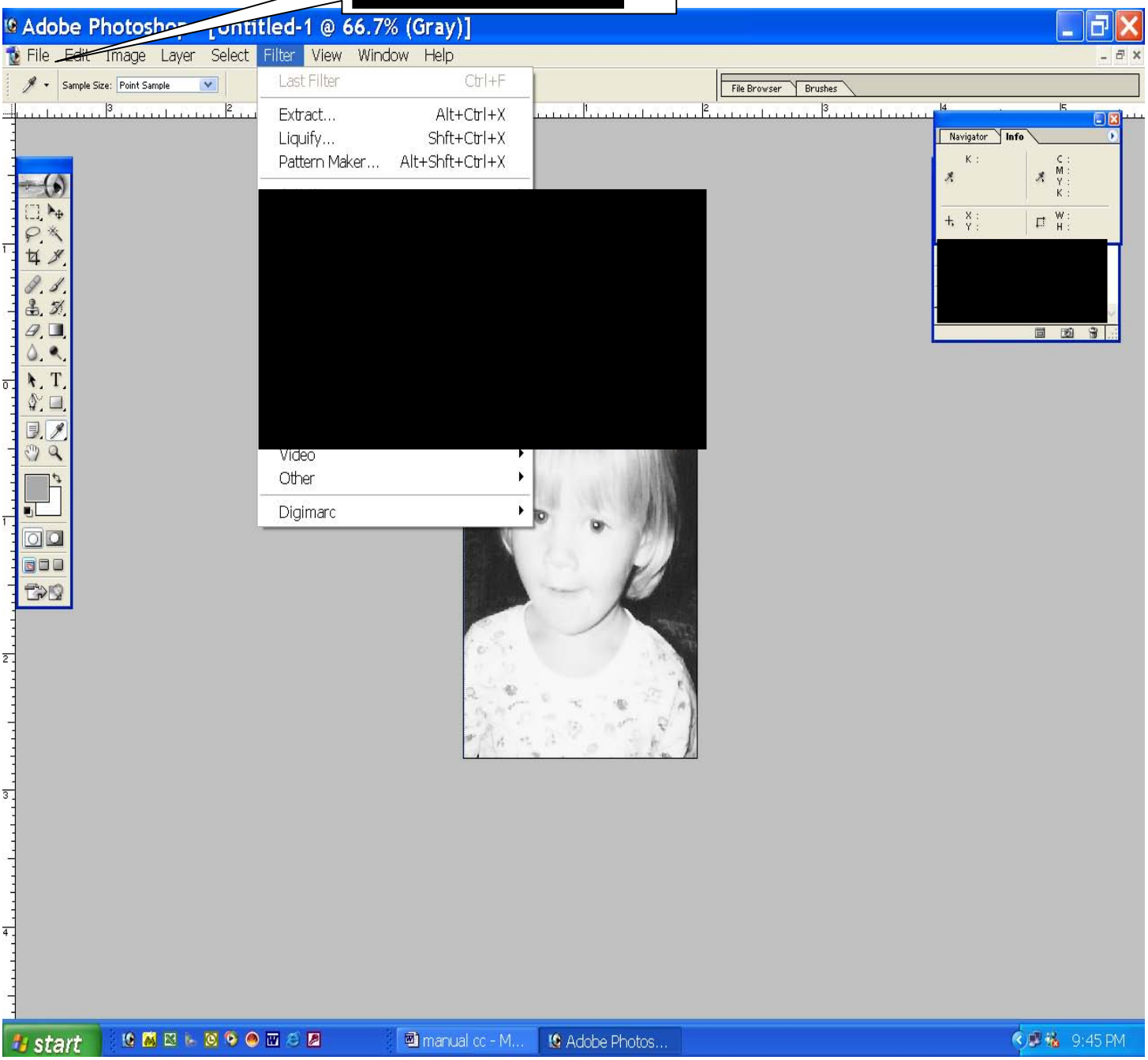
Convert the image [redacted] mode is essential to capturing the subtle shades and textures that give the appearance of depth and dimension.

Lighten the image

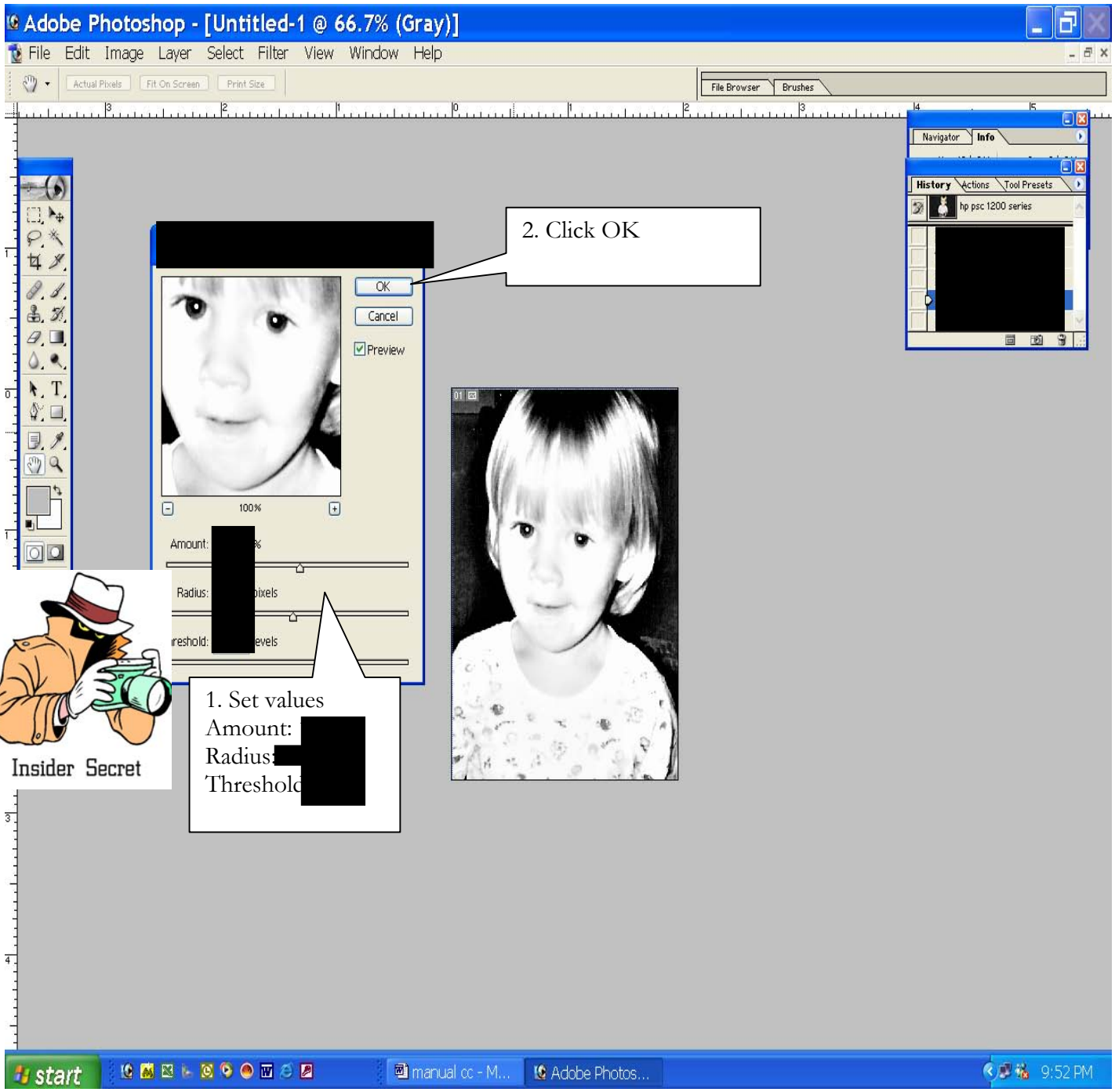


Insider Secret

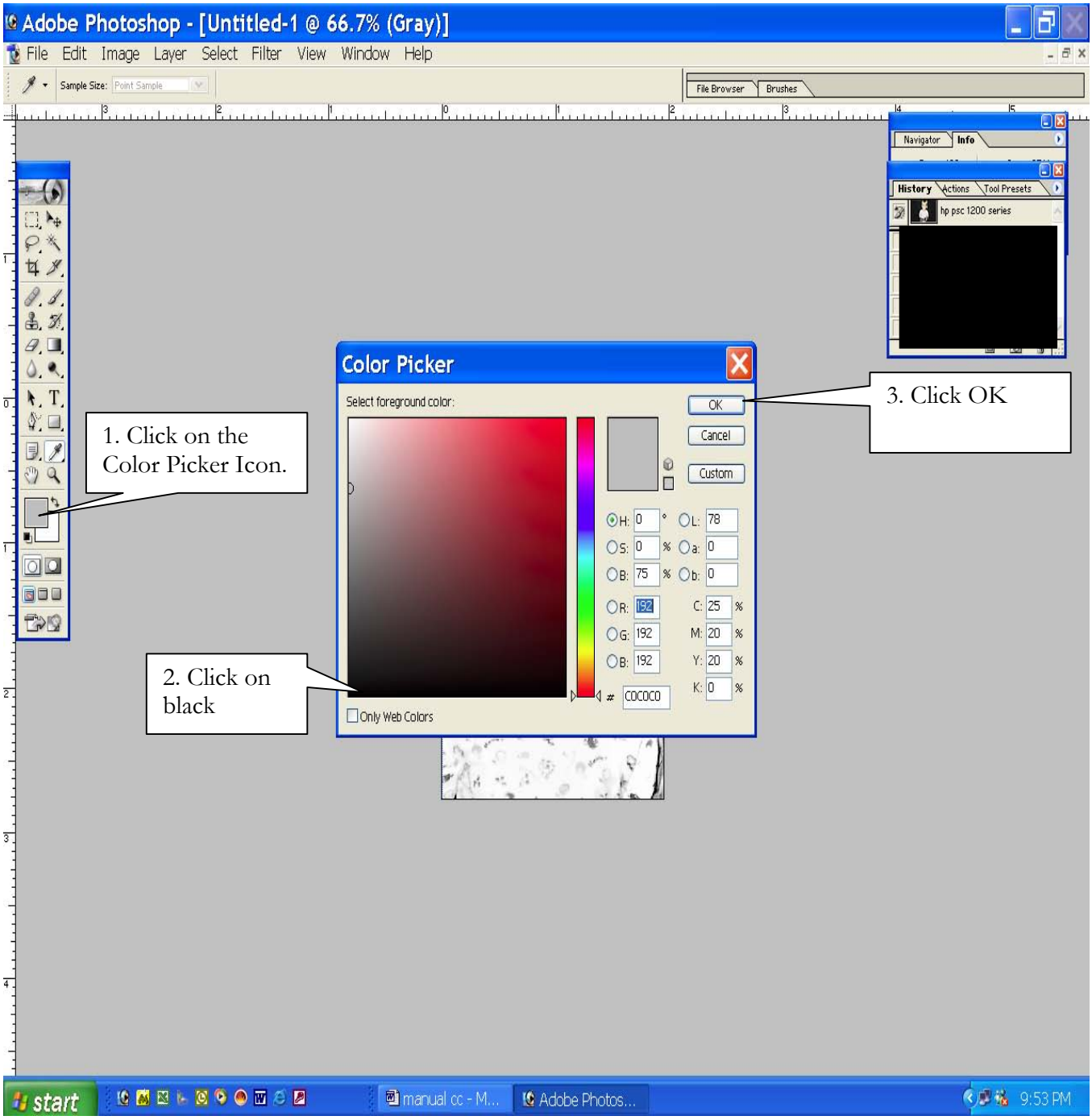
The [redacted] function is critical to a properly lightened image. The [redacted] function allows the image to lighten selectively, i.e., the dark shades become light first, followed by the light shades. In this way, the proper contrast is maintained. Do not use the [redacted] function since all of the shades will lighten at the same rate.



The [redacted] function is a critical step to the ClearImage System. What [redacted] does is bring out, define and contrast the image's features. Next, we will define the exact values for [redacted]

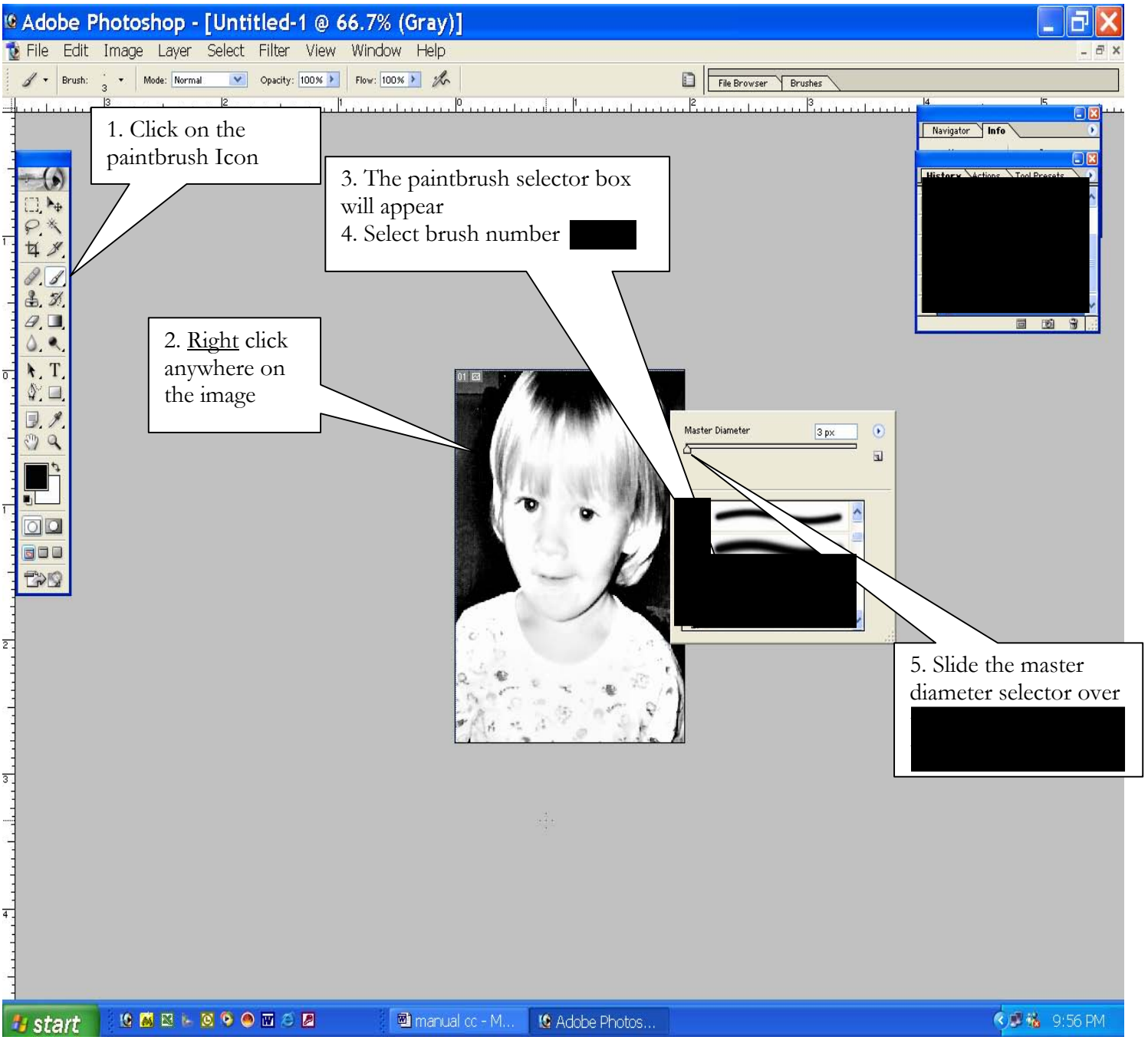


Notice how the image is dramatically defined. After you enter the [redacted] values, they will reappear next time, there is no need to re-enter them. These [redacted] values are really valuable. Share them with no one.

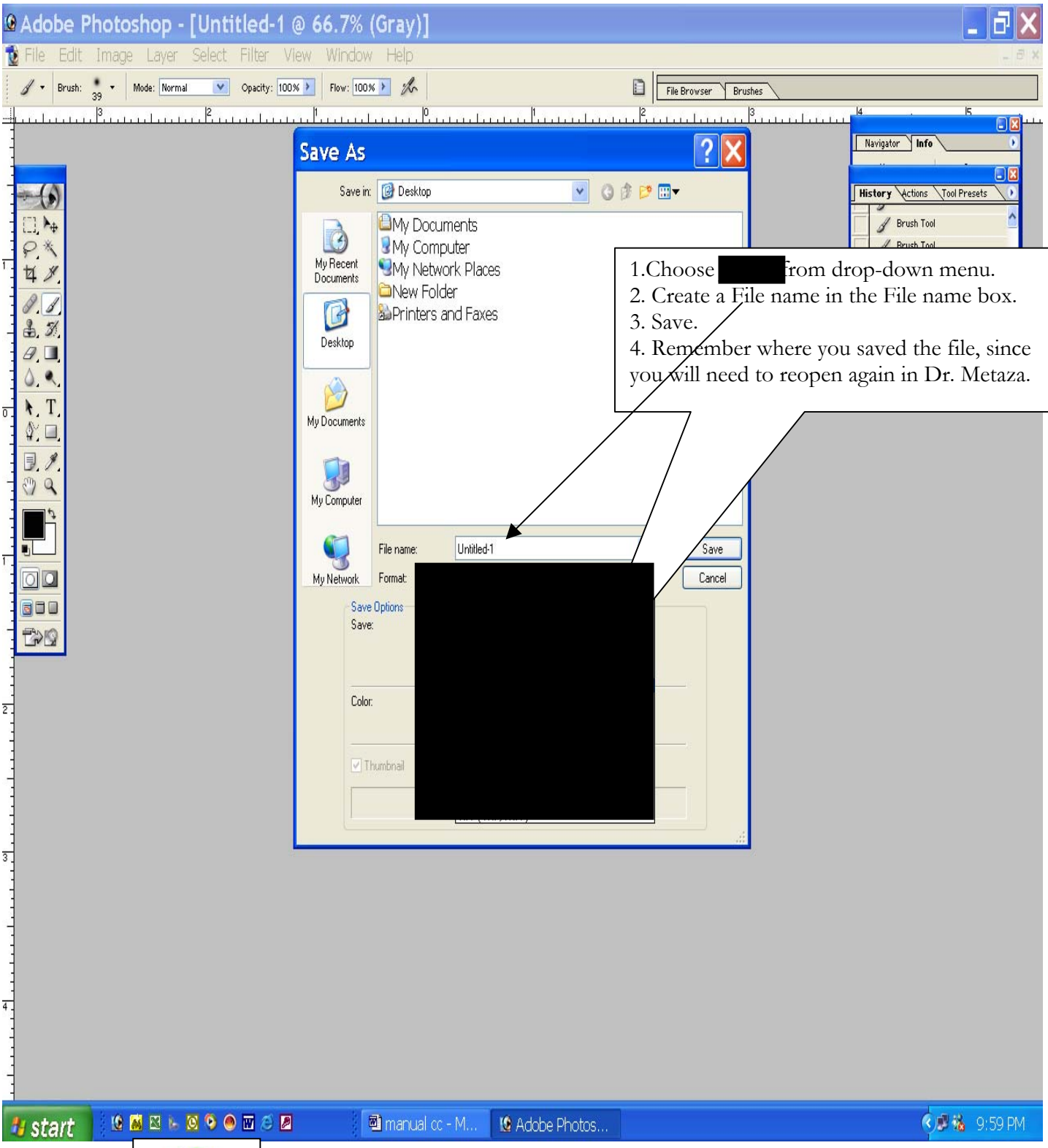


Insider Secret

I have discovered that when [redacted] the stylus and machine resources are focused on the face [redacted] resulting in a highly defined face. Here's why, if the stylus is busy with [redacted] sense the difference between the [redacted] the result is a less defined face. Furthermore, when you eliminate [redacted] the charm will complete faster since there is less impact duty.

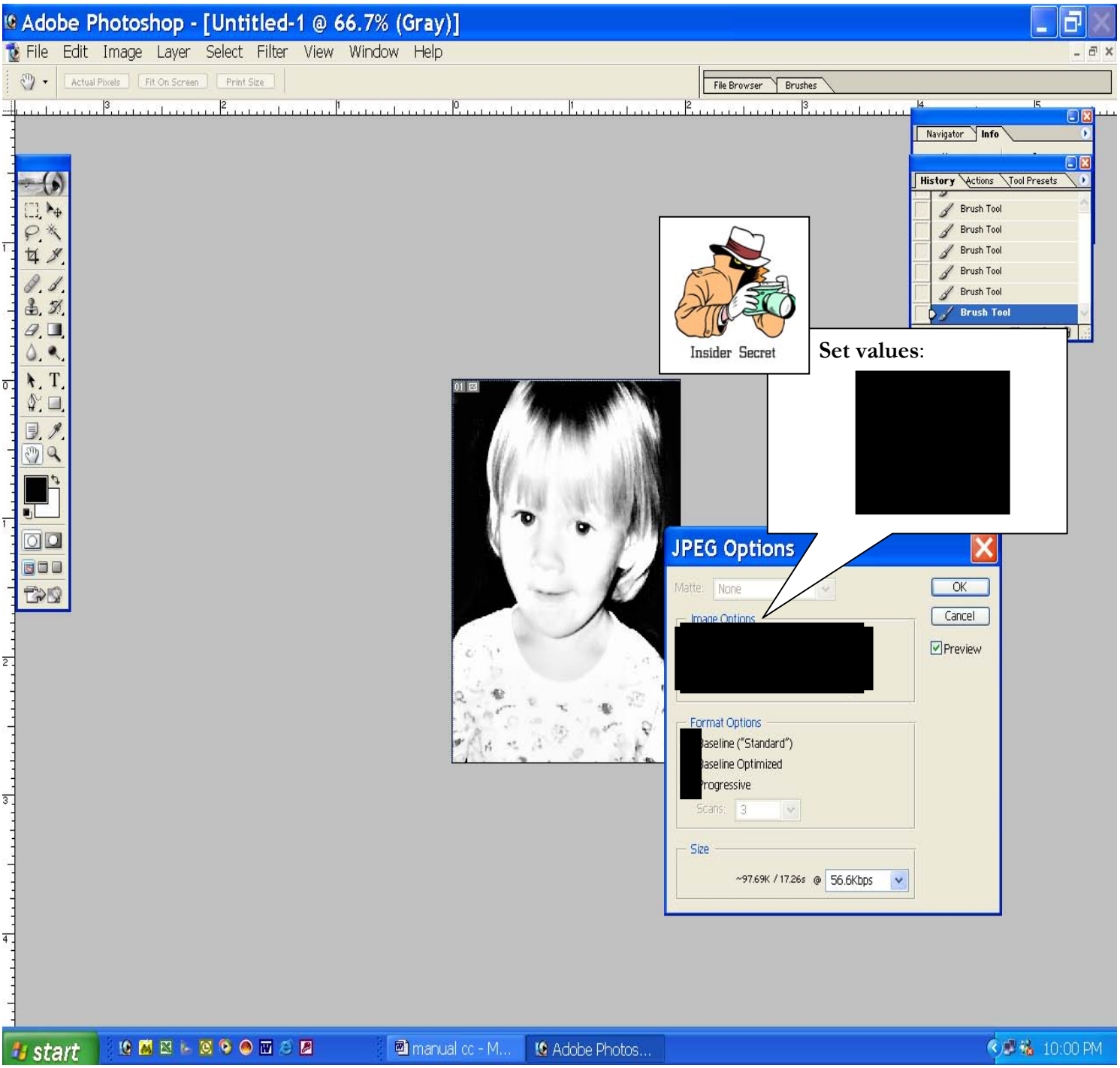

Adobe Photoshop - [Untitled-1 @ 66.7% (Gray)]
File Edit Image Layer Select Filter View Window Help
1. Click on the paintbrush Icon
2. Right click anywhere on the image
3. The paintbrush selector box will appear
4. Select brush number [redacted]
5. Slide the master diameter selector over [redacted]
Master Diameter
3 px
Navigator
Info
start
manual cc - M...
Adobe Photos...
9:56 PM

A number [redacted] brush is ideal, even with a shaky hand, and is the secret to creating a [redacted] This brush will allow you to [redacted], since this creates an excellent finish.



Power Tip

Be sure to use the [redacted] file type. It offers the finest image quality for the MPX engraver.

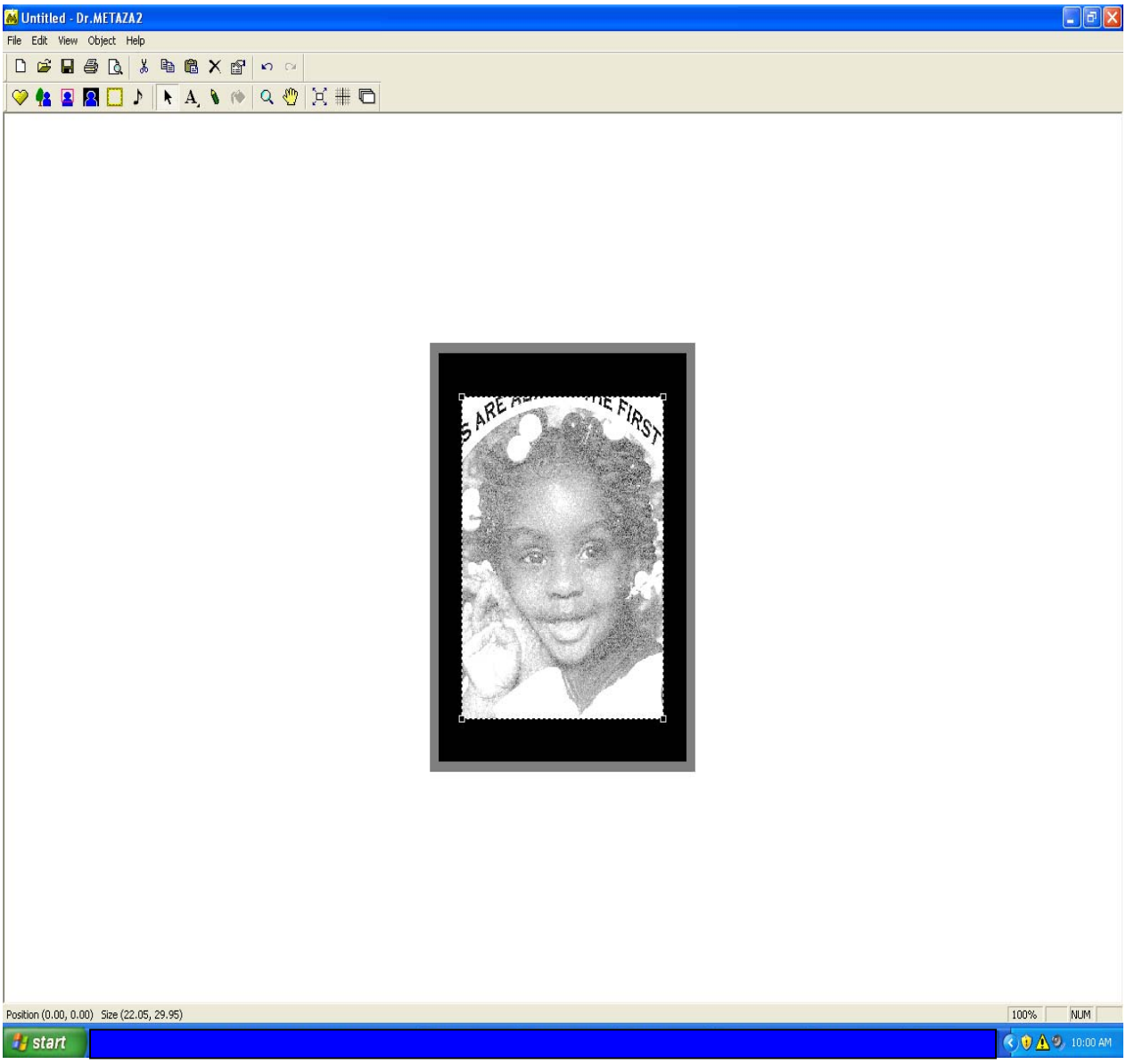


Power Tip

Save as [redacted] file, in our opinion, the most pleasing output. After saving your [redacted] in Photoshop, you can minimize Photoshop. Congratulations, you have completed the first part to the ClearImage System. We can now minimize Photoshop and turn our attention to [redacted]

Additional valuable information

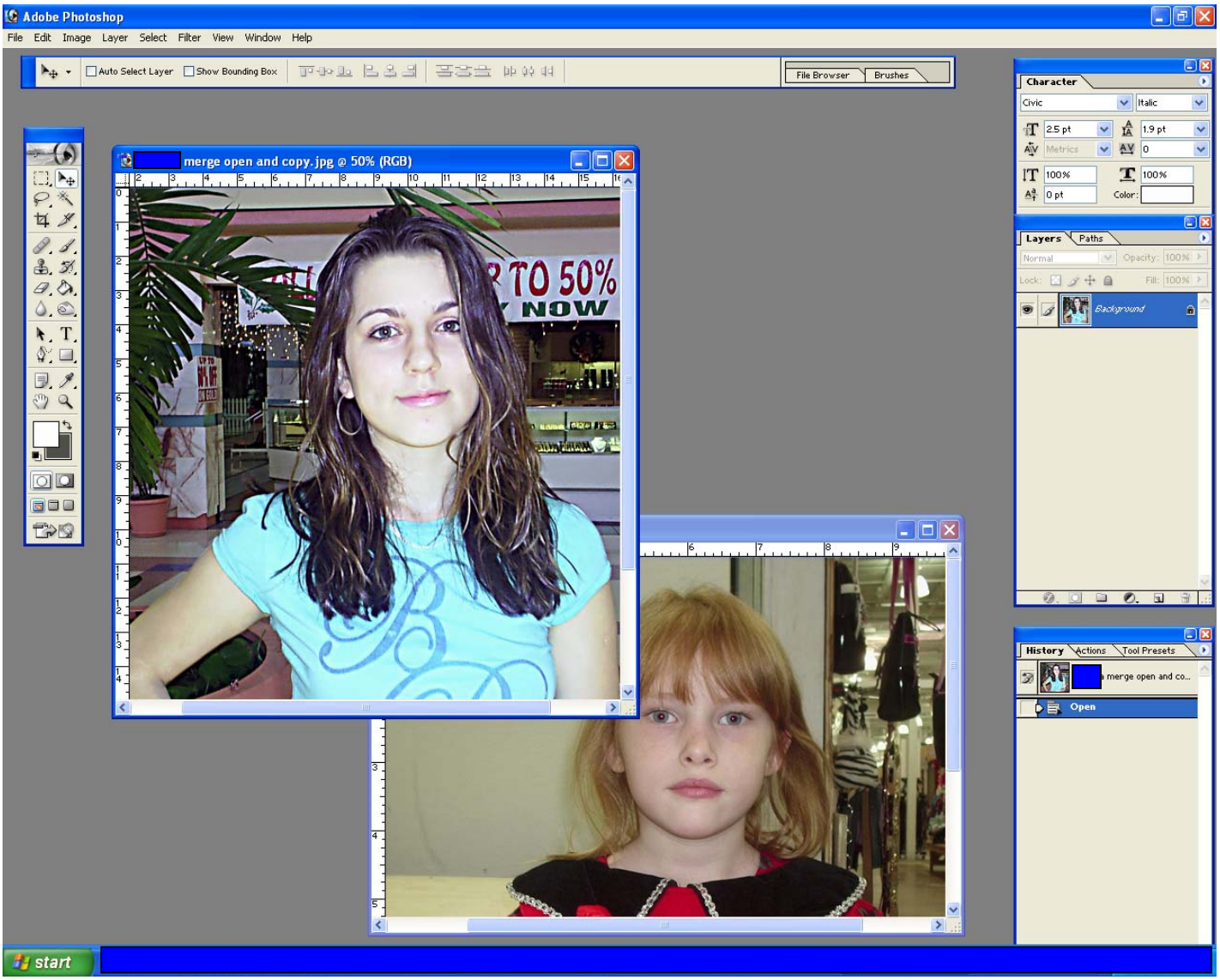
How to correct newspaper clippings , magazine photos/obituaries with pixilated look



Many times a customer may bring you a newspaper clipping photo, obituary photo or magazine photo to scan. The scanner will reproduce the tiny dots that make up the picture causing a grainy and unattractive photo. This is particularly noticeable when you import the picture into Dr. Metaza 2. There is an easy solution that will allow you to smooth out the appearance of the photo.

Merging two or more pictures for increased sales

Often times a customer won't have the people they want together on one picture. But they will have them on separate pictures. Now you can bring these two pictures together, and stop losing sales.

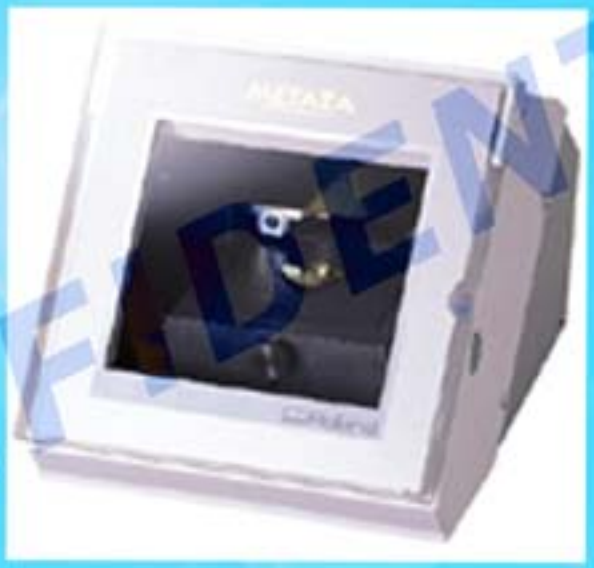


Open the two pictures you want to merge, convert to grayscale.

The Insider's Secrets to Driver Output Preparation

Essential elements to configuring the MPX-60 driver output software

CONFIDENTIAL



Vol. II

For the MPX-60

Pendabryte METAL

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The Insider's Secrets to Driver Output Preparation

Essential elements to configuring the MPX output software

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Vol. II

INTRODUCTION

I purchased an MPX-60 three years ago, from a distributor who was very happy to sell it to me. Problem was, I didn't know how to use it. And when I did figure out the basics, I was left disappointed with the image. I believed the machine was capable of much more, so I persisted.

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Power Tip

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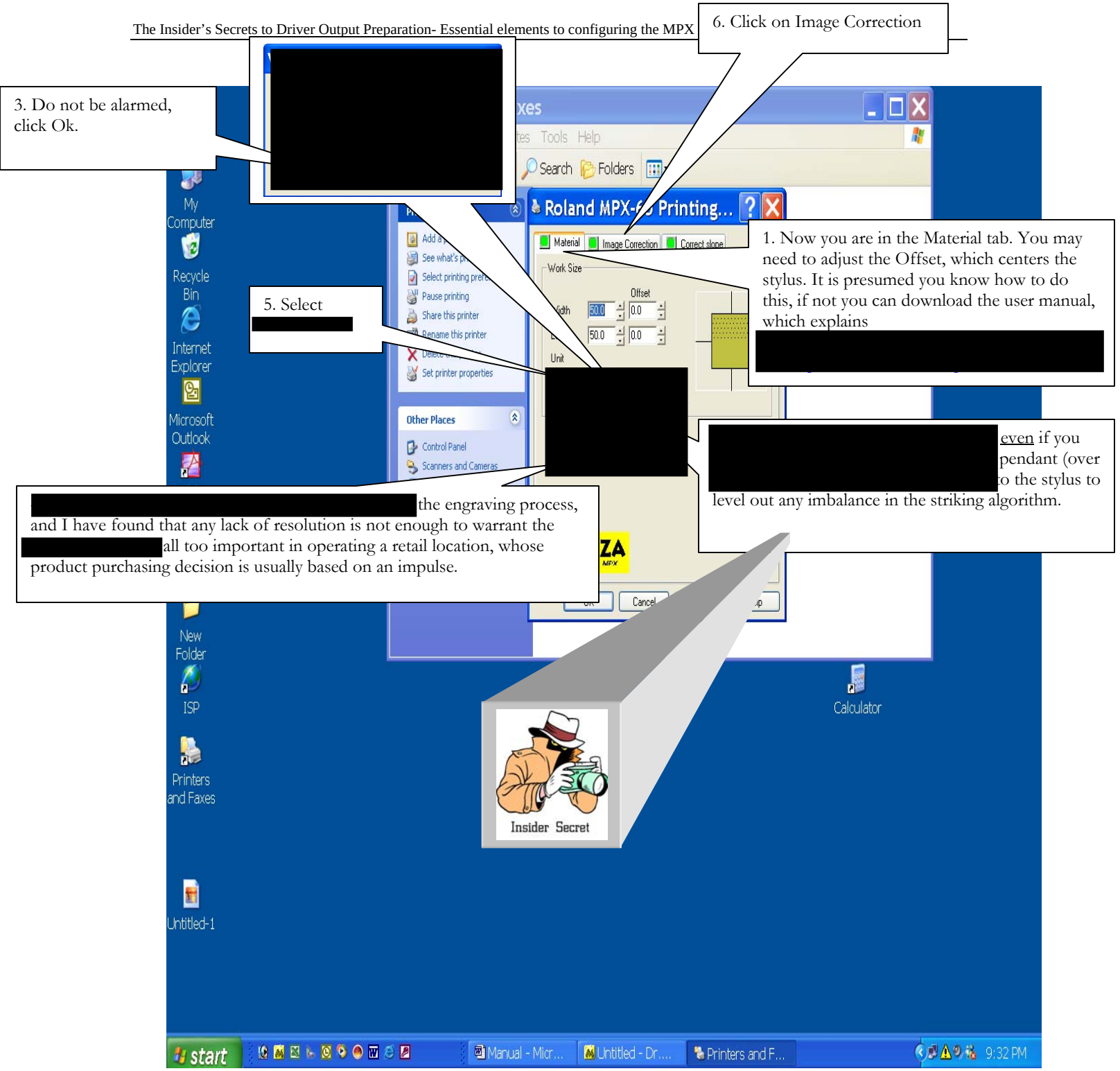
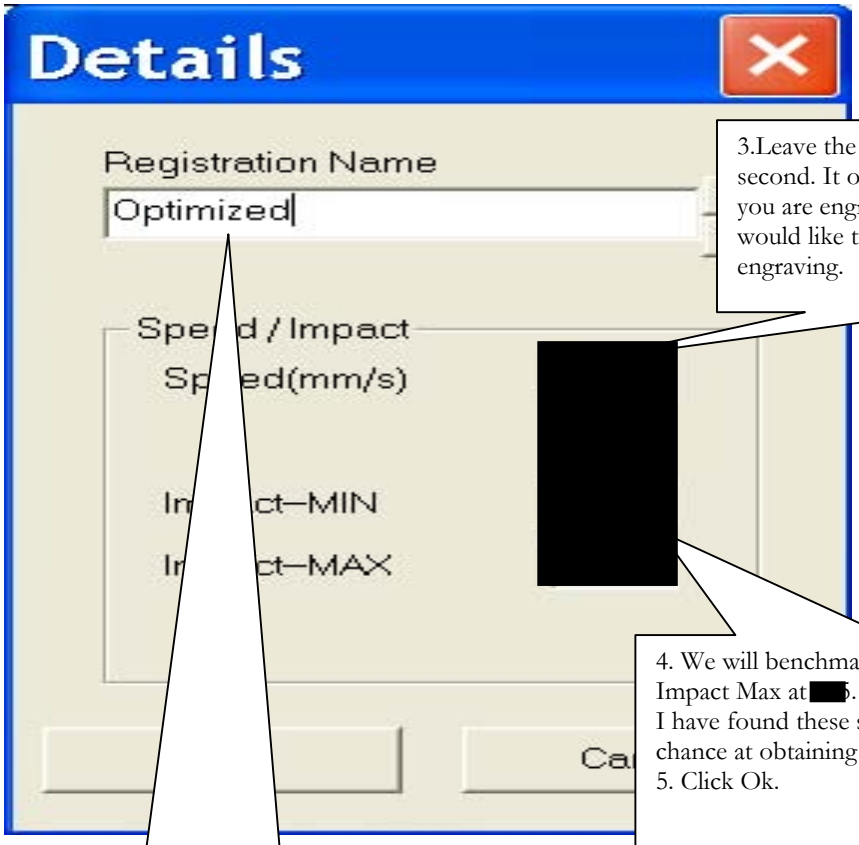
At this point we will assume that your image has been edited, has been imported into Dr. Metaza 2 and that you are now ready to print onto your pendant. Let's begin.


6. Click on Image Correction
3. Do not be alarmed, click Ok.
[redacted]
5. Select [redacted]
1. Now you are in the Material tab. You may need to adjust the Offset, which centers the stylus. It is presumed you know how to do this, if not you can download the user manual, which explains [redacted]
[redacted] even if you [redacted] pendant (over [redacted] to the stylus to level out any imbalance in the striking algorithm.
[redacted] the engraving process, and I have found that any lack of resolution is not enough to warrant the [redacted] all too important in operating a retail location, whose product purchasing decision is usually based on an impulse.
Roland MPX-[redacted] Printing...
Material
Image Correction
Work Size
Offset
Unit
Other Places
Control Panel
Scanners and Cameras
Insider Secret
Calculator
start
9:32 PM

*I can't tell you how important it is [redacted] for outputting streak-free engravings. If everything you've tried before has not worked to even out any streaks in your engravings, [redacted] should correct this unwanted anomaly inherent in the Metaza engraver.

Benchmark the impact settings

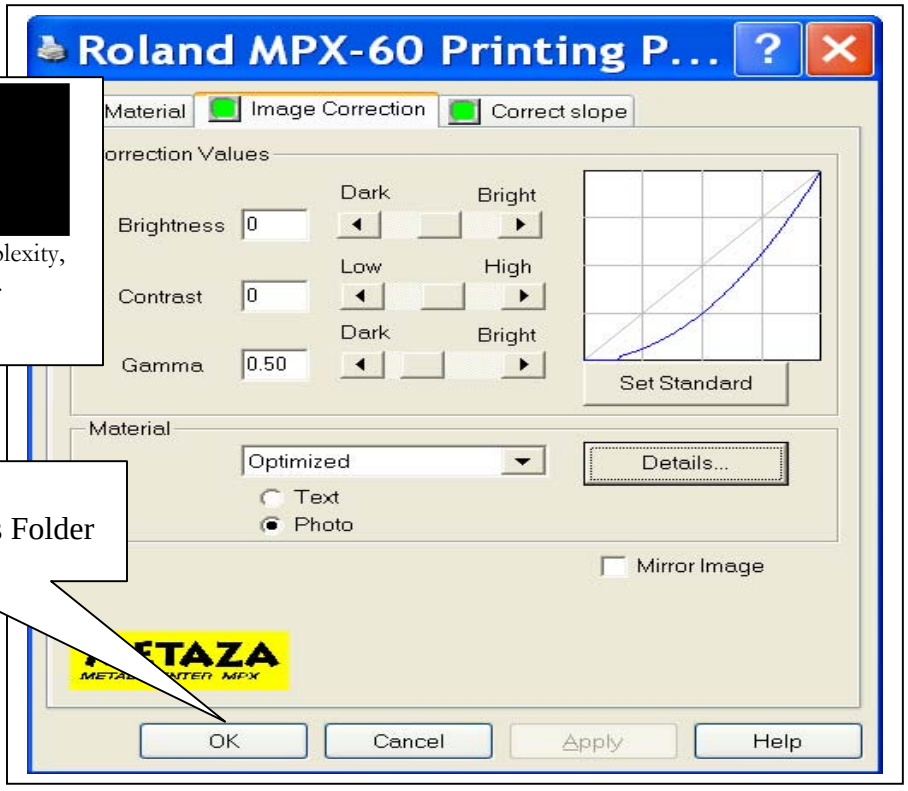


3.Leave the Impact Speed at [redacted] second. It only needs to be s[redacted] when you are engraving a penda[redacted] would like to maximize th[redacted] engraving.

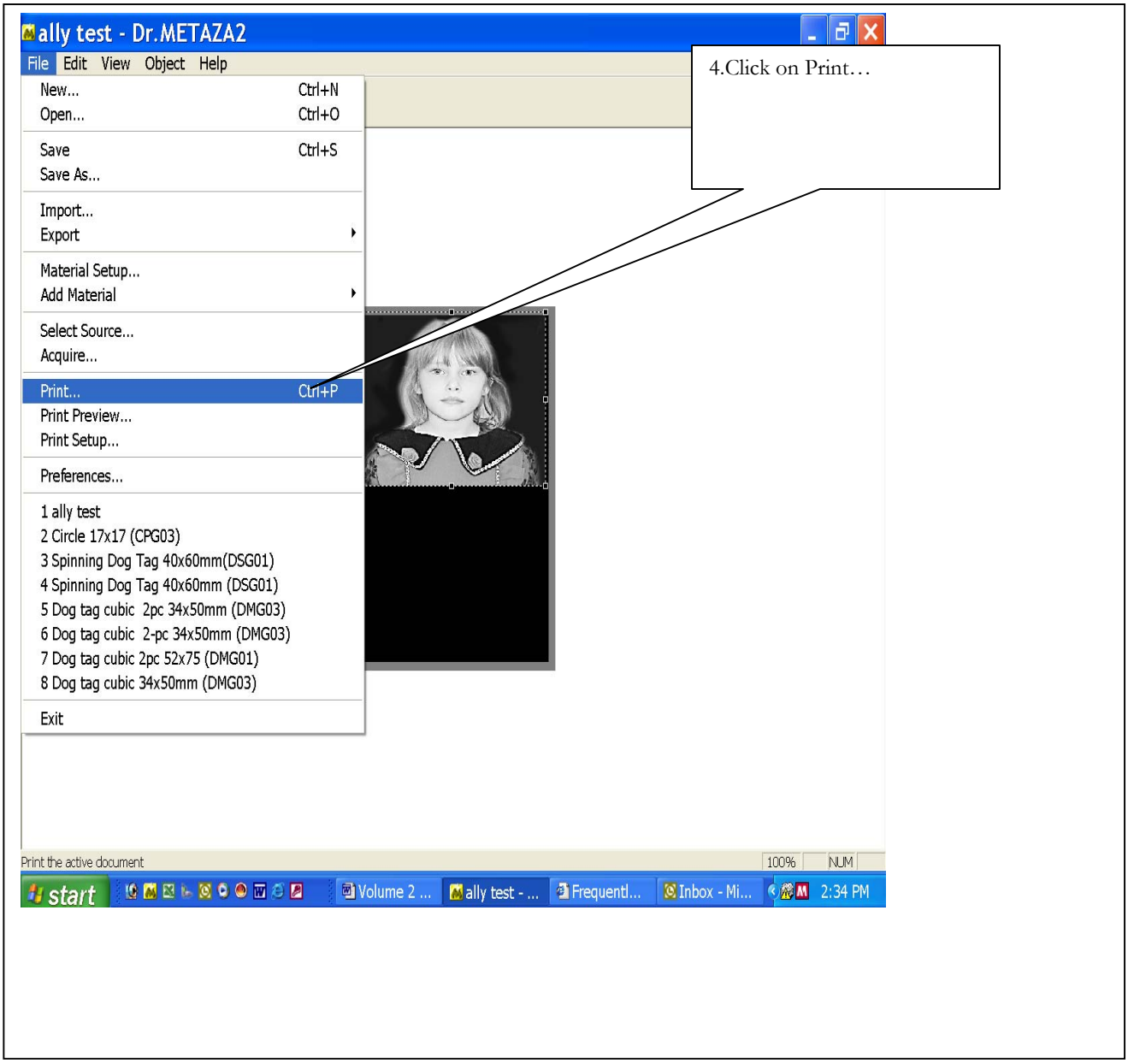
4. We will benchmark our Impact-Min at [redacted] and our Impact Max at [redacted]. This is the optimal starting point. I have found these settings to give you the best chance at obtaining an optimal image on the first try.
5. Click Ok.

[redacted]

and its associated variables, creating even more complexity, in an endeavor already as difficult as metal engraving.



6. Click Ok.
7. Minimize the Printers Folder



1. Open Dr. Metaza 2

2. Import your properly edited image, see (Vol. 1 The Insider's Secrets to Image Preparation- Photoshop Image Enhancing Techniques as they Apply to Metal Engraving) Notice how I am sizing the picture to span only half of the pendant. We do this to allow space for a next test print, in which case we simply move it down to the lower half, all the while using the same image. In this way we conserve pendants. Please understand that you must do your calibrations using the exact image for each test so that you do not introduce any other variables.

3. I have found that the natural adhesive on the rubber mat is not strong enough to secure the pendant during the engraving process; you will need double sided tape. Place a 28 x 50mm pendant on the tape; flatten with your plexi square. At this point I polish, with some pressure, the top of the blank pendant to secure it to the pad (very important that it not move, this also serves to remove finger prints).

Inspect your image

Table 1

Initial benchmark settings	Result		Adjustments
Min [redacted] and max [redacted] Interval [redacted]		Too light, you must [redacted] Keep [redacted] until you reach the optimal image*	Min [redacted] and Max [redacted]
Min [redacted] and max [redacted] Interval [redacted]		Too dark, you must [redacted] Keep [redacted] until you reach the optimal image*	Min [redacted] and Max [redacted]

The above relationship is essential in understanding how to set the impact setting for your engraver. You will notice that at all times, whether [redacted] follow this relationship after you print your first test pendant and for each successive pendant until you have fine-tuned the image to an amazing masterpiece. The *optimal image should have bright whites, subtle shades of gray and dark blacks, all coexisting on one pendant. Note: every time you install the drivers onto your computer for the first time, you must re-calibrate the minimum and maximum impact settings. These settings will never translate into the same striking force, so forget about writing the settings down and saving them for next time. The good news is that once they are calibrated onto your computer, they should remain. I say should, because they have been known to "drift" occasionally.

An *optimal image will have three distinct qualities merged into one image. They are bright whites, subtle shades of gray and deep black regions, faithfully reproduced on one pendant. **If you have captured this optimal image, engraved onto your first test pendant with the initial settings, then congratulations, no further adjustments are needed.** If your image, however, lacks these three distinct qualities you will need to fine-tune your settings. Let's Begin: